

NEW SPECIES OF INSECTS
COLLECTED BY C. WILLIAM BEEBE IN SOUTH AMERICA

Among the small collection of insects which I brought back from Venezuela and British Guiana, a number proved to be new to science. These have been kindly described for me by Prof. Vernon L. Kellogg, Mr. A. N. Caudell and Dr. Harrison G. Dyar.

There are two new Mallophaga, one new Mantis, and twenty-five new species, including six new genera of Moths.

In a future scientific contribution to the Avifauna of these countries I will have occasion to refer to many of these insects as forming the food of certain birds. C. W. Beebe.

I.

MALLOPHAGA FROM THE HOATZIN

(Opisthocomus hoazin).

BY VERNON L. KELLOGG, Stanford University, Calif.

By the kindness of Mr. C. William Beebe of the New York Zoological Park I have had the opportunity of examining a few specimens of Mallophaga taken from the Hoatzin (Venezuela). This curious bird, the single species of the pheasant-like, although strongly aberrant family Opisthocomidae has for long been a taxonomic puzzle to the ornithologists. It has been with unusual interest, therefore, that I have examined these specimens of their parasites. Although many of the Mallophaga are rather catholic in their host likings some of them keep pretty strictly to special bird groups. This is especially true of the parasites of the Pheasants, the Phasianidae having their own types of Mallophaga more conspicuously, perhaps, than any other bird group. If then the Hoatzin is truly a close relative of the Pheasants, as ornithologists seem to think, this fact might, perhaps, be indicated by the affinities of its parasites.

As a matter of fact this lead starts admirably. For one of the three species taken from the Hoatzin by Mr. Beebe belongs to a characteristically pheasant-infesting genus. This parasite is *Goniocotes curtis* which Nitzsch (the first student of the Mallophaga) took from a Hoatzin over fifty years ago, and which has not been recorded from any other host since. Of the fifty-six species of *Goniocotes* known, practically all are recorded only from the Pheasants and Pheasant-like birds.

But the other two species of Mallophaga from the Hoatzin that are represented in Mr. Beebe's collection are unfortunately new species and species belonging to groups without any such *penchant* for a particular host group. One of these, however, a *Lipeurus*, belongs to the group *clypeati sutura distincta* which is composed of species so far practically limited to such strictly

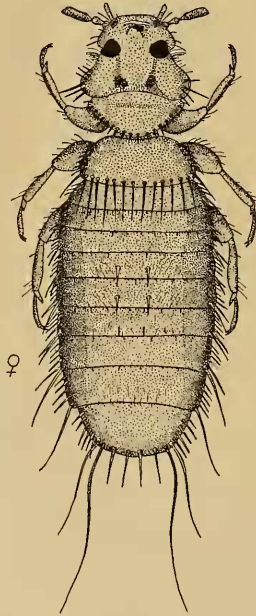


FIG. 38. *Colpocephalum armiferum*, new species.

maritime birds as Albatrosses, Cormorants, Boobies and Pelicans. The other new species is a *Colpocephalum* with two of its nearest forms (*spinulosum* and *spineum*) also from maritime or shore birds. *C. spinosum*, a third related form, is, however, a Francolin (African Partridge) infesting species.

Thus there is nothing too definite about the taxonomic indications to be derived from the Hoatzin's Mallophagan parasites. *Unless the Lipeurus could be a straggler from some maritime bird species!* Mr. Beebe informs me that there has been no opportunity for such straggling; either normal (that is, from approach of the hosts in nature) or abnormal (that is, from approach of the host bodies in live cage or game bag or on the work table).

The descriptions of the two new species follow:

Colpocephalum armiferum, new species. (Fig. 38.)

One male and three females taken by C. Wm. Beebe from the Hoatzin, *Opisthocomus hoazin*, (Venezuela).

A *Colpocephalum* of general likeness to *C. spinosum* from the African Partridge, *Francolinus capensis*, and to *C. spineum* from various maritime birds and *C. spinulosum* from shore birds. But this species from the Hoatzin is quite distinct from any of these forms and in its possession of an extraordinary thorniness of thorax and abdomen stands well apart from any other species in the genus.

Female, body, length 1.7 mm.; width, .58 mm.; many stout, pointed spines along the lateral margins and on the posterior borders of prothorax and metathorax; unicolorous pale golden, except for two strong blackish-brown ocular blotches and less distinct and large occipital and clypeal blotches.

Head, length, .36 mm.; width, .45 mm.; the usual marginal hairs all of the character of spines. Prothorax with a series of short, stout spines along the posterior border; metathorax with a series of large conspicuous spines along the nearly straight posterior margin, and with spines on the posterior halves of the lateral margin. Shorter but conspicuous spines along the lateral margins of the abdominal segments with longer spines and hairs on the last two segments.

Male, body, length 1.6 mm.; width, .51 mm.; head, length, .33 mm.; width, .43 mm.; a little darker golden in color than female, with the brown blotches of the head a little more pronounced. Last abdominal segments without flexible hairs but with lateral margins and posterior margin of last segment with strong spines. The strongly chitinized genitalia show plainly through the body wall in the single male specimen I have.

Lipeurus absitus, new species. (Fig. 39.)

One male and two females taken by C. Wm. Beebe from the Hoatzin, *Opisthocomus hoazin*, (Venezuela).

This new *Lipeurus* of the group *clypeati sutura distincta* (all the other members of which have been taken from strictly

maritime and coast birds) is thoroughly distinct from the other species of the group. The unusual disproportion in length between the head and the rest of the body give it an odd large-headed appearance.

Male, body, length, 2 mm.; width, .55 mm.; with strong median dorsal blotches on the short abdomen; head and thorax with colored lateral margins.

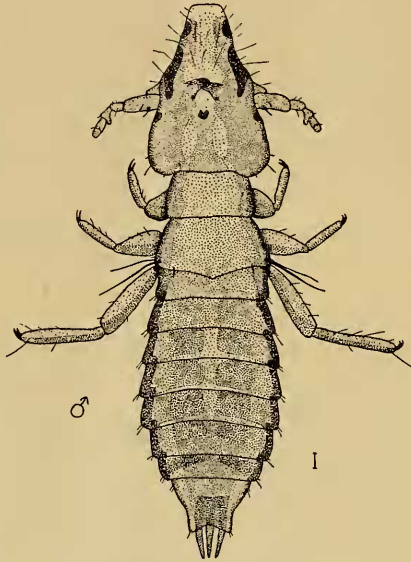


FIG. 39. *Lipeurus absitus*, new species.

Head, length, .7 mm.; width, .5 mm.; clypeal front flatly convex with distinct clear margin beyond the signature, which is distinct; strongly colored lateral clypeal bands distinctly interrupted by a suture, and with the ends expanding inwards; a few conspicuous hairs along lateral clypeal margins; temples not strongly expanded, nor temporal angles produced; antennae with enlarged first segment without appendage but with a short hair on a slight swelling, third segment with well-marked lateral process. Head unicolorous except for the darker clypeal bands and signature.

Prothorax small and with lateral and posterior margin straight; metathorax with very obtuse but distinct median angle on the posterior margin; two or three longish flexible hairs in posterior lateral angles. Fairly unicolorous golden brown.

Abdomen with distinct median brownish blotches; sparse hairs on dorsum and a few short spine-like hairs in posterior angles of each segment; lateral borders chitinized but not strongly colored. Last segment with marked concavities on the lateral margins and with strong posterior angles; only a few short hairs.

Female, body, length, 2.43 mm.; width, .76 mm.; head, length, .7 mm.; width, .51 mm.; abdomen markedly broader and heavier than in male; the median dorsal abdominal blotches are divided in the middle and extend laterally nearly or quite to the chitinized lateral borders; in the median longitudinal clear space there are two distinct longish hairs on the dorsum of each segment; last abdominal segment is much narrower than the next to last, and is all brown; it has slight concavities in its lateral margins just in front of the posterior angles.